

## REMARKS

This is intended as a full and complete response to the Office Action mailed on July 3, 2007, having a shortened statutory period for response set to expire on August 3, 2007, and to provide a full and complete response to the Office Action mailed on January 5, 2007. Please reconsider the claims pending in the application for reasons discussed below.

The previous response to office action mailed on January 5, 2007 included a Supplemental Information Disclosure Statement and accompanying PTO Form 1449 listing references, a Terminal Disclaimer, and a credit card authorization Form PTO-2038 for \$245 in payment of fee for submission of Supplemental Information Disclosure Statement and Terminal Disclaimer. Please consider the references cited in the Supplemental Information Disclosure Statement and enter the Terminal Disclaimer.

The Office Action mailed on July 3, 2007 indicated that Applicant did not include status identifiers for claims 26, 27, and 35-37 in the previous response to office action. Applicant includes status identifiers in those claims in this response to correct this deficiency. Following are the text remarks which were included in the previous response.

Claims 16-18 and 21 remain pending in the application and are shown above. Claims 1-10 were previously cancelled by Applicant, and claims 11-15, 19, and 20 were previously withdrawn due to a restriction requirement. Claims 16-18 and 21 stand rejected. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 16-18 and 21 stand provisionally rejected as double patenting under 35 USC § 101 on grounds that the claims conflict with claims 1, 5-7, and 11-13 of Application No. 11/319,114. Applicant includes herewith a terminal disclaimer with respect to Application No. 11/319,114 (note: this was included in the previous response) and will submit a response to the office action for that patent application with amended claims (note: this response has been submitted). Withdrawal of the rejection is respectfully requested.

Claim 21 stands rejected under 35 USC § 103(a) as being unpatentable over Buchan et al. (U.S. Patent No. 5,201,339). The Examiner states that Buchan et al. discloses an apparatus comprising a dispenser having a lower chamber (designated by number 18), upper chamber (designated by number 16), upstream opening (designated by number 22), and downstream opening (designated by number 24). The Examiner further states that Figure 4 of Buchan et al.

shows a lower portion of the upper chamber disposed below an upper portion of the lower chamber and above a lower portion of the lower chamber, the lower portion of the lower chamber being unobstructed over substantially its entire length. The Examiner then states that Buchan et al. discloses a first valve (designated by number 88) and a second valve (designated by number 96) and further discloses using a solenoid valve 204 in the upstream opening of the Figure 5 embodiment. The Examiner concludes that it would have been obvious to provide electrically powered valves such as the solenoid valve 204 for the first and second valves 88 and 96 of Buchan et al. because it would merely be a substitution of one known valve for another valve.

Applicant respectfully traverses the rejection. Applicant submits that Buchan et al. does not disclose or suggest “said lower portion of said lower chamber being unobstructed over substantially its entire length” as recited in claim 21. In the embodiment shown in Figures 2 and 3 of Buchan et al., at least three significant obstructions to the cylindrical body portion 18 (which the Examiner uses to designate the lower chamber) water flow passage 20 exist: the water outlet arrangement 30 including the elbow 32 and annular reducer 34, the spring 50, and the annular reducer 26 at the water inlet. In the embodiment shown in Figure 4 of Buchan et al., two of these obstructions to the cylindrical body portion 18 water flow passage exist—the water outlet arrangement 30 including the elbow and annular reducer 34 and the annular reducer 26. These obstructions to the length of the lower portion of the lower chamber are essential to the operation of the Buchan et al. device because they regulate water level and pressure to sustain accurate dosages. See Buchan et al. at col. 10 lns. 3-7, col. 1 lns. 43-58, col. 2 lns. 42-48. Buchan et al. states the following at col. 10 lns. 3-7:

Furthermore, due to the use of the elbow 32, the entrained air in the upper regions of the flow passage 20 as well as the compressed air in the cartridge, cannot readily escape so that the accurate dosage levels can be sustained for long periods of time.

To establish a *prima facie* case of obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” See *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Because Buchan et al. does not teach, show, or suggest each and every element of claim 21 and because the Examiner does not provide any rationale, motivation, or suggestion

for modifying Buchan et al. to support obviousness of claim 21, Applicant respectfully requests removal of the rejection to claim 21. Therefore, Buchan et al., alone or in combination with other reasoning provided by the Examiner, does not teach, show, or suggest an apparatus, comprising a dispenser having a lower chamber, an upper chamber, an upstream opening, and a downstream opening, a lower portion of said upper chamber being disposed below an upper portion of said lower chamber and above a lower portion of said lower chamber, said lower portion of said lower chamber being unobstructed over substantially its entire length; a first electrically powered valve operably connected to said upstream opening; and a second electrically powered valve operably connected to said downstream opening, as recited in claim 21. Applicant thus respectfully requests withdrawal of the rejection to and allowance of claim 21.

Claims 16-18 stand rejected under 35 USC § 103(a) as being unpatentable over Buchan et al. in view of Reeves (U.S. Patent No. 6,183,630) or Fredericks (U.S. Patent No. 3,107,156). The Examiner states that Buchan et al. discloses elements of the claims including a plurality of openings (designated by number 42) passing through a side surface, but acknowledges that Buchan et al. does not disclose a plurality of openings passing through a bottom surface of the lower portion of the upper chamber. The Examiner then states that Reeves discloses a cylinder (designated by number 24) connected to a fitting with an upper chamber (designated by number 28) having a lower portion (designated by number 24) with a bottom surface having a plurality of openings (designated by numbers 34 and 38) and a plurality of openings (designated by number 36) in the side surface. The Examiner concludes that it would have been obvious to provide a plurality of openings in the bottom surface of the lower portion in the cylinder of Buchan et al. as taught by Reeves, because with such a modification the mixing of the tablets with the water is facilitated and the content of the tablets mixing with the water may be controlled by changing the size of the openings in the side and bottom surfaces.

The Examiner alternatively states that Fredericks supplies the plurality of openings in the bottom surface of the lower portion in the cylinder of Buchan et al, stating that Fredericks discloses in Figures 3-5 a dispenser comprising a cylinder (designated by number 20) connected to a fitting (designated by number 38) with an upper chamber having a lower portion (designated by number 32) with a bottom surface having a plurality of openings (designated by number 34) and a plurality of openings (designated by numbers 50 and 54) in the side surface. The Examiner

then states that it would have been obvious to provide a plurality of openings in the bottom surface of the lower portion in the cylinder of Buchan et al., as taught by Fredericks, since with such a modification the water entry into the cylinder is facilitated for mixing.

Applicant respectfully traverses the rejection for the following reasons. First, none of the cited references teach, show, or suggest “said lower portion of said lower chamber being unobstructed over substantially its entire length” as recited in claim 16 and its dependent claims 17 and 18. As discussed above in relation to claim 21, Buchan et al. does not disclose its cylindrical body portion 18 water flow passage 20 being unobstructed over substantially its entire length and in fact teaches providing multiple obstructions thereto to accomplish its essential purpose. Likewise, Reeves teaches substantial obstruction to the flow path through the lower portion 24. The entire fluid flow path, with the exception of the portion of fluid which may flow through holes 36 in the cylinder portion 20, is obstructed by the cylinder portion 20. The fluid flow path of the lower portion 24 of Reeves is so greatly obstructed that only a portion of the fluid is even allowed to flow past the cylinder portion 20, while the other portion of the fluid flows through bottom openings 38 and into the base portion 80. See Reeves at col. 2 lns. 44-52, col. 4 lns. 29-45, col. 6 ln. 37 to col. 7 ln. 5, and col. 7 lns. 31-36. Fredericks also does not disclose “said lower portion of said lower chamber being unobstructed over substantially its entire length,” as the siphon tube or pipe 18 obstructs essentially the entire flow path through the container 10. Because Buchan et al., Reeves, or Fredericks, alone or in combination with one another, do not teach, show, or suggest each and every element of claims 16-18, Applicant requests removal of the rejection to claims 16-18.

Second, Applicant respectfully submits that the combination of Reeves or Fredericks with Buchan et al. to provide the concept of providing a plurality of openings in the bottom surface of the lower portion in the cylinder of Buchan et al. is improper. Buchan et al. explicitly states that the end pieces 38, 40 of the container 35 are “imperforate,” “closing off respective ends of the sleeve 36.” Webster’s Revised Unabridged Dictionary states that imperforate means “not perforated; having no opening or aperture.” When the apparatus of Buchan et al. is in the inoperative position shown in Figure 1, the absence of perforations on the bottom end of the sleeve 36 prevents water from contacting the tablets within the sleeve 36 when the apparatus is in the inoperative position. See Buchan et al. at col. 8, lns. 60-67. Buchan et al. specifically teaches against allowing the water to contact the tablets when the apparatus is disposed in the

inoperative position at col. 8, lines 60-67. Because Buchan et al. specifically teaches against including perforations on the bottom surface of the sleeve 36 and explicitly states that the bottom surface of the sleeve 36 should not be perforated, Buchan et al. cannot be combined with other references which disclose perforation in this location. Applicant therefore requests removal of the rejection to claims 16-18 under Buchan et al. in view of Reeves or Fredericks because these references cannot be properly combined.

Furthermore, Applicant respectfully submits that combining Reeves with Buchan et al. to provide the concept of providing a plurality of openings in the bottom surface of the lower portion of the cylinder of Buchan et al. is improper because the motivation to combine the two references provided by the Examiner is not in line with the teachings of Reeves and Buchan et al. The Examiner states that it would be obvious to provide the openings in the bottom surface of the lower portion in the cylinder of Buchan et al., as taught by Reeves, since “with such a modification the mixing of the tablets with the water is facilitated and the content of the tablets mixing with the water can be controlled by changing the size of the openings in the side and bottom surfaces.” However, the passages 34 and slits 38 of the cylinder portion of Reeves exist for the opposite purpose from that stated by the Examiner, to *prevent* the mixing of the tablets with water rather than to facilitate their mixing. Specifically, the passages 34 and slits 38 only exist for the purpose of directing certain portions of the wastewater *away from* the tablets 14 to increase the life of the chlorine tablets. See col. 6, ln. 37 to col. 7 ln. 36. Changing the size of the openings is not mentioned or alluded to in any of the references. Because the Reeves openings exist for the opposite motivation to that provided by the Examiner, Reeves teaches away from this combination and from this motivation. Accordingly, Applicant respectfully requests removal of the rejection to claims 16-18 under Buchan et al. in view of Reeves because these references cannot properly be combined.

Therefore, Buchan et al., alone or in combination with Reeves or Fredericks, does not teach, show, or suggest a dispenser comprising a tee connector having an upper opening, said tee connector forming a lower chamber; and a cylinder secured to said upper opening of said tee connector, said cylinder forming an upper chamber, said upper chamber having a lower portion disposed below an upper portion of said lower chamber and above a lower portion of said lower chamber, said lower portion of said upper chamber having a bottom surface with a plurality of openings passing therethrough and having a side surface with a plurality of openings passing

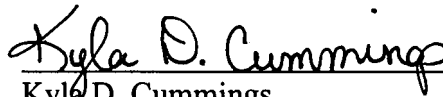
therethrough; and said lower portion of said lower chamber being unobstructed over substantially its entire length, as recited in claim 16 and claims dependent thereon. Accordingly, Applicant respectfully requests withdrawal of the rejection to and allowance of claims 16-18.

Applicant adds new claims 22-37. New claims 22-31 depend from claim 21, while new claims 32-37 depend from claim 16 and 18; therefore, Applicant submits that new claims 22-37 are patentable over the cited references for at least the same reasons as claims 16, 18, and 21 are patentable, as discussed above.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests allowance of the claims.

Respectfully submitted,



Kyle D. Cummings

Registration No. 50,682

SPEED LAW FIRM

111 Center Street, Suite 1200

Little Rock, Arkansas 72201

Telephone: (501) 219-2800

Facsimile: (501) 219-2879

Attorney for Applicant